

# PATENT ABSTRACTS OF JAPAN

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## (54) DIGITAL RADIO TRANSMISSION SYSTEM

(57)Abstract:

PURPOSE: To prevent a living line from being unoccupied and to effectively utilize a frequency by modulating-processing a spare system signal by means of a living system modulator and sending it to the said living line.

CONSTITUTION: At a 64QAM/4PSK converter 35, a switching signal which is an external input is generated based on the line quality of the living line. Since, when the switching signal indicates a quality deterioration at 0 level, AND gates 53~56 are set in an output inhibiting condition, in-phase component signals I2 and I3, I1 are made equal, and orthogonal component signals Q2 and Q3, Q1 are made equal in the same way. Consequently, the inputs of a D-A converter 36 are made into the in-phase component signal I1 and orthogonal component signal Q1, and they are made into the inputs of a 4PSK system. Thus, when a changeover to a spare system is executed, a transmission can be executed by utilizing the living line whose line quality is deteriorated without interrupting the spare system signal.

